SEQUENCE LISTING

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<120> VECTOR

<130> DYOU23.001APC

<140> 09/445375
<141> 2000-03-21

<150> PCT/GB98/01627
<151> 1998-06-04

<150> GB9711579.4
<151> 1997-06-04

<160> 24

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 910
<212> DNA
<213> Artificial Sequence

<220>
<223> Coding sequence of a 5T4scFv designated 5T4scFv.1.

<221> misc_feature
<222> (1)...(910)
<223> n = A,T,C or G

<400> 1
gaggtccagc ttcagcagtc tggacctgac ctggtgaagc ctggggcttc vsgdvkgasa 60
gtgaagatat cctgcaaggc ttctggttac tcattcactg gctactacav ksckasgyst 120
gyytgcactg ggtgaagcag agccatggaa agaqccttga gtggattgga cgtmhwvksh 180
gkswgratta atcctaacaa tggtgttact ctctacaacc agaaatttcaa ggacaannng 240
vtynkkdkgg ccatattaac tgtagacaag tcatccacca cagcctacat ggagctccat 300
vdkssttaym gcagcctgac atctgaggac tctgcggtct attactgtgc aagatctact 360
rstsdsavyy carstatgat tacgaactat gttatggact actggggtca agtaacctca 420
gtcacmtnyv mdywgvtsvt cgtctcctca ggtggtggtg ggagcggtgg tggcggcact 480
ggcggcggcg vssgggggsgg ggtggggatc tagtattgtg atgacccaga ctcccacatt 540
cctgcttgtt tcagcagssv mtttvsagga gacagggtta ccataacctg caaggccagt 600
cagagtgtga gtaatgagdr vttckassvs ndtgtagdtt ggtaccaaca gaagccaggg 660
cagtctccta cactgctcat atvawykgst cctatacatc cagtcgctac gctggagtcc 720
ctgatcgctt cattggcagt sytssryagv drgsggatat gggacggatt tcactttcac 780
catcagcact ttgcaggctg aagagygtdt tstadcctgg cagtttattt ctgtcagcaa 840
gattataatt ctcctccgac gttcgavycd ynstgtggag gcaccaagct ggaaatcaaa 900
cgggggtkkr 910

<210> 2
<211> 2239
<212> DNA
<213> Artificial Sequence

<220>
<223> Coding sequence of a 5T4scFv designated 5T4scFv1.

<221> misc_feature
<222> (1)...(2239)
<223> n = A,T,C or G

<400> 2
aagcttccac catgggatgg agctgtatca tcctcttctt ggtagcaaca astmgwscva 60
tgctacaggt gtccactccg aggtccagct tcagcagtct ggacctgacc tatgvhsvsg 120
dggtgaagcc tggggcttca gtgaagatat cctgcaaggc ttctggttac tvkgasvksc 180
kasgycattc actggctact acatgcactg ggtgaagcag agccatggaa agagcstgyy 240
mhwvkshgks cttgagtgga ttggacgtat taatcctaac aatggtgtta ctctctacaa 300
wgrnnngvty nccagaaatt caaggacaag gccatattaa ctgtagacaa gtcatccacc 360
akkdkatvdk sstcagccta catggagctc cgcagcctga catctgagga ctctgcggtc 420
tattaymrst sdsavytact gtgcaagatc tactatgatt acgaactatg ttatggacta 480
ctggggycar stmtnyvmdy wgtcaagtaa cctcagtcac cgtctcctca ggtggtggtg 540
ggagcggtgg tgvtsvtvss ggggsgggcg gcactggcgg cggcggatct agtattgtga 600
tgacccagac tcccacaggt ggggssvmtt tttcctgctt gtttcagcag gagacagggt 660
taccataacc tgcaaggcca gvsagdrvtt ckastcagag tgtgagtaat gatgtagctt 720
ggtaccaaca gaagccaggg cagtsvsndv awykgctcct acactgctca tatcctatac 780
atccagtcgc tacgctggag tccctstsyt ssryagvgat cgcttcattg gcagtggata 840
tgggacggat ttcactttca ccatcagdrg sgygtdttsc actttgcagg ctgaagacct 900
ggcagtttat ttctgtcagc aagattatat adavycdyat tctcctccga cgttcggtgg 960
aggcaccaag ctggaaatca aacgggccns tgggtkkrat ccaccaaggg cccatcggtc 1020
ttccccctgg caccctcctc caagagcacs tkgsvassks tctctggggg cacagcggcc 1080
ctgggctgcc tggtcaagga ctacttcccc gsggtaagcv kdyaaccggt gacggtgtcg 1140
tggaactcag gcgccctgac cagcggcgtg cacvtvswns gatsgvhacc ttcccggctg 1200
tcctacagtc ctcaggactc tactccctca gcagcgttav ssgysssvgg tgaccgtgcc 1260
ctccagcagc ttgggcaccc agacctacat ctgcaacgvt vsssgttycn tgaatcacaa 1320
gcccagcaac accaaggtgg acaagaaagt tgagcccaaa vnhksntkvd kkvktcttgt 1380
gacaaaactc acacatgccc accgtgccca gcacctgaac tcctscdkth tccaggggcg 1440
accgtcagtc ttcctcttcc ccccaaaacc caaggacacc ctcaggsvkk dttgatctcc 1500
cggacccctg aggtcacatg cgtggtggtg gacgtgagcc acmsrtvtcv vvdvshgaag 1560
accctgaggt caagttcaac tggtacgtgg acggcgtgga ggtgcadvkn wyvdgvvhta 1620
atgccaagac aaagccgcgg gaggagcagt acaacagcac gtaccgtgna ktkrynstyr 1680
tggtcagcgt cctcaccgtc ctgcaccagg actggctgaa tggcaaggag vvsvtvhdwn 1740
gktacaagtg caaggtctcc aacaaagccc tcccagcccc catcgagaaa acykckvsnk 1800
aaktcatctc caaagccaaa gggcagcccc gagaaccaca ggtgtacacc ctgcskakgr 1860
vytccccatc ccgggatgag ctgaccaaga accaggtcag cctgacctgc ctgsrdtknv 1920
stcgtcaaag gcttctatcc cagcgacatc gccgtggagt gggagagcaa tggvkgysda 1980
vwsnggcagc cggagaacaa ctacaagacc acgcctcccg tgctggactc cgacgnnykt 2040
tvdsdgctcc ttcttcctct acagcaagct caccgtggac aagagcaggt ggcaggsysk 2100
tvdksrwcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc acaaccagnv 2160
scsvmhahnh ctacacgcag aagagcctct ccctgtctcc gggtaaatga gtgcgacggc 2220
ytkssgkvr rcaagctts 2239

<210> 3
<211> 1809

<212> DNA
<213> Artificial Sequence

<220>
<223> Coding sequence of B7-1.CT4.1

<221> misc_feature
<222> (1)...(1809)
<223> n = A,T,C or G

<400> 3
atgggccaca cacggaggca gggaacatca ccatccaagt gtccatacct mghtrrgtss 60
kcycaatttc tttcagctct tggtgctggc tggtctttct cacttctgtt cagnvagshc 120
sgtgttatcc acgtgaccaa ggaagtgaaa gaagtggcaa cgctgtcctg tgvhvtkvkv 180
atscggtcac aatgtttctg ttgaagagct ggcacaaact cgcatctact ggcaghnvsv 240
atrywaaagg agaagaaaat ggtgctgact atgatgtctg gggacatgaa tatatkkkmv 300
tmmsgdmngg cccgagtaca agaaccggac catctttgat atcactaata acctctccwy 360
knrtdtnnsa ttgtgatcct ggctctgcgc ccatctgacg agggcacata cgagtgtgtv 420
arsdgtycvt gttctgaagt atgaaaaaga cgctttcaag cgggaacacc tggctgaagv 480
kykdakrhat gacgttatca gtcaaagctg acttccctac acctagtata tctgactttv 540
tsvkadtssd gaaattccaa cttctaatat tagaaggata atttgctcaa cctctggagg 600
tsnrrcstsg gttttccaga gcctcacctc tcctggttgg aaaatggaga agaattaaat 660
ghswngncca tcaacacaac agtttcccaa gatcctgaaa ctgagctcta tgctgttant 720
tvsdtyavag cagcaaactg gatttcaata tgacaaccaa ccacagcttc atgtgtctss 780
kdnmttnhsm ccatcaagta tggacattta agagtgaatc agaccttcaa ctggaataca 840
akyghrvntn wntccaagca agagcatttt cctgatggag gcgggggatc cgaggtccag 900
ctttkhdggg gsvcagcagt ctggacctga cctggtgaag cctggggctt cagtgaagat 960
atcsgdvkga svksctgcaa ggcttctggt tactcattca ctggctacta catgcactgg 1020
gtgackasgy stgyymhwva gcagagccat ggaaagagcc ttgagtggat tggacgtatt 1080
aatcctaack shgkswgrnn aatggtgtta ctctctacaa ccagaaattc aaggacaagg 1140
ccatattaac ngvtynkkdk attgtagaca agtcatccac cacagcctac atggagctcc 1200
gcagcctgac atvdksstta ymrstctgag gactctgcgg tctattactg tgcaagatct 1260
actatgatta cgaacsdsav yycarstmtn tatgttatgg actactgggg tcaagtaacc 1320
tcagtcaccg tctcctcagg yvmdywgvts vtvssgtggt ggtgggagcg gtggtggcgg 1380
cactggcggc ggcggatcta gtattggggs ggggtggggs stgatgaccc agactcccac 1440
attcctgctt gtttcagcag gagacagggt tvmtttvsag drvaccataa cctgcaaggc 1500
cagtcagagt gtgagtaatg atgtagcttg gtattckass vsndvawycc aacagaagcc 1560
agggcagtct cctacactgc tcatatccta tacatccakg stsytsgtcg ctacgctgga 1620
gtccctgatc gcttcattgg cagtggatat gggacgsrya gvdrgsgygt gatttcactt 1680
tcaccatcag cactttgcag gctgaagacc tggcagttta dttstadavy tttctgtcag 1740
caagattata attctcctcc gacgttcggt ggaggcacca cdynstgggt agctggaaat 1800
caaataakk 1809

<210> 4
<211> 887
<212> DNA
<213> Artificial Sequence

<220>
<223> Human B7-2 sequence followed by a linker.

<221> misc_feature
<222> (1)...(887)
<223> n = A,T,C or G

<400> 4
atgggactga gtaacattct ctttgtgatg gccttcctgc tctctggtgc mgsnvmasga 60
tgctcctctg aagattcaag cttatttcaa tgagactgca gacctgccat akayntadgc 120
caatttgcaa actctcaaaa ccaaagcctg agtgagctag tagtatttca nsnssvvtgg 180
caggaccagg aaaacttggt tctgaatgag gtatacttag gcaaagawdn vnvygkgaaa 240
tttgacagtg ttcattccaa gtatatgggc cgcacaagtt ttgattkdsv hskymgrtsd 300
cggacagttg gaccctgaga cttcacaatc ttcagatcaa ggacaagggc sdswtrhnkd 360
kgttgtatca atgtatcatc catcacaaaa agcccacagg aatgattcgc atychhkktg 420
mrccaccaga tgaattctga actgtcagtg cttgctaact tcagtcaacc tghmnssvan 480
saaatagtac caatttctaa tataacagaa aatgtgtaca taaatttgac cvsntnvynt 540
tgctcatcta tacacggtta cccagaacct aagaagatga gtgttttgct csshgykkms 600
vaagaaccaa gaattcaact atcgagtatg atggtattat gcagaaatct crtknstydg 660
mksaagataa tgtcacagaa ctgtacgacg tttccatcag cttgtctgtt tcadnvtydv 720
sssvsttccc tgatgttacg agcaatatga ccatcttctg tattctggaa actgadvtsn 780
mtctdcaaga cgcggctttt atcttcacct ttctctatag agcttgagga ccctcktrss 840
sdagcctccc ccagaccaca ttcctggagg cgggggatcc dhggggs 887

<210> 5
<211> 1518
<212> DNA
<213> Artificial Sequence

<220>
<223> pBSII/Leader/scFv/HG1.

<400> 5
atggcttgca attgtcagtt gatgcaggat acaccactcc tcaagtttcc atgtccaagg 60
ctcattcttc tctttgtgct gctgattcgt ctttcacaag tgtcttcaga tgttgatgaa 120
caactgtcca agtcagtgaa agataaggta ttgctgcctt gccgttacaa ctctccgcat 180
gaagatgagt ctgaagaccg aatctactgg caaaaacatg acaaagtggt gctgtctgtc 240
attgctggga aactaaaagt gtggcccgag tataagaacc ggactttata tgacaacact 300
acctactctc ttatcatcct gggcctggtc ctttcagacc ggggcacata cagctgtgtc 360
gttcaaaaga aggaaagagg aacgtatgaa gttaaacact tggctttagt aaagttgtcc 420
atcaaagctg acttctctac ccccaacata actgagtctg gaaacccatc tgcagacact 480
aaaaggatta cctgctttgc ttccgggggt ttcccaaagc ctcgcttctc ttggttggaa 540
aatggaagag aattacctgg catcaatacg acaatttccc aggatcctga atctgaattg 600
tacaccatta gtagccaact agatttcaat acgactcgca accacaccat taagtgtctc 660
attaaatatg gagatgctca cgtgtcagag gacttcacct gggaaaaacc cccagaagac 720
cctcctgata gcaagcccgg gggtggtggg agcggtggtg gcggcagtgg cggcggcgga 780
actagtgagg tccagcttca gcagtctgga cctgacctgg tgaagcctgg ggcttcagtg 840
aagatatcct gcaaggcttc tggttactca ttcactggct actacatgca ctgggtgaag 900
cagagccatg gaaagagcct tgagtggatt ggacgtatta atcctaacaa tggtgttact 960
ctctacaacc agaaattcaa ggacaaggcc atattaactg tagacaagtc atccaccaca 1020
gcctacatgg agctccgcag cctgacatct gaggactctg cggtctatta ctgtgcaaga 1080
tctactatga ttacgaacta tgttatggac tactggggtc aagtaacttc agtcaccgtc 1140
tcttcaggtg gtggtgggag cggtggtggc ggcactggcg gcggcggatc tagtattgtg 1200
atgacccaga ctcccacatt cctgcttgtt tcagcaggag acagggttac cataacctgc 1260
aaggccagtc agagtgtgag taatgatgta gcttggtacc aacagaagcc agggcagtct 1320
cctacactgc tcatatccta tacatccagt cgctacgctg gagtccctga tcgcttcatt 1380
ggcagtggat atgggacgga tttcactttc accatcagca ctttgcaggc tgaagacctg 1440
gcagtttatt tctgtcagca agattataat tctcctccga cgttcggtgg aggcaccaag 1500
ctggaaatca aacggtaa 1518

<210> 6
<211> 2090

<212> DNA
<213> Artificial Sequence

<220>
<223> 5T4 scFv-human IgE fusion construct.

<400> 6
ctcgagccac catgggatgg agctgtatca tcctcttctt ggtagcaaca gctacaggtg 60
tccactccga ggtccagctg cagcagtctg gacctgacct ggtgaagcct ggggcttcag 120
tgaagatatc ctgcaaggct tctggttact cattcactgg ctactacatg cactgggtga 180
agcagagcca tggaaagagc cttgagtgga ttggacgtat taatcctaac aatggtgtta 240
ctctctacaa ccagaaattc aaggacaagg ccatattaac tgtagacaag tcatccacca 300
cagcctacat ggagctccgc agcctgacat ctgaggactc tgcggtctat tactgtgcaa 360
gatctactat gattacgaac tatgttatgg actactgggg tcaagtaact tcagtcaccg 420
tctcttcagg tggtggtggg agcggtggtg gcggcactgg cggcggcgga tctagtattg 480
tgatgaccca gactcccaca ttcctgcttg tttcagcagg agacagggtt accataacct 540
gcaaggccag tcagagtgtg agtaatgatg tagcttggta ccaacagaag ccagggcagt 600
ctcctacact gctcatatcc tatacatcca gtcgctacgc tggagtccct gatcgcttca 660
ttggcagtgg atatgggacg gatttcactt tcaccatcag cactttgcag gctgaagacc 720
tggcagttta tttctgtcag caagattata attctcctcc gacgttcggt ggaggcacca 780
agcttgaaat caaacgggcc tccacacaga gcccatccgt cttcccctttg acccgctgct 840
gcaaaaacat tccctccaat gccacctccg tgactctggg ctgcctggcc acgggctact 900
tcccggagcc ggtgatggtg acctgggaca caggctccct caacgggaca actatgacct 960
taccagccac caccctcacg ctctctggtc actatgccac catcagcttg ctgaccgtct 1020
cgggtgcgtg ggccaagcag atgttcacct gccgtgtggc acacactcca tcgtccacag 1080
actgggtcga caacaaaacc ttcagcgtct gctccaggga cttcacccca cccaccgtga 1140
agatcttaca gtcgtcctgc gacggcggcg ggcacttccc cccgaccatc cagctcctgt 1200
gcctcgtctc tgggtacacc ccagggacta tcaacatcac ctggctggag gacgggcagg 1260
tcatggacgt ggacttgtcc accgcctcta ccacgcagga gggtgagctg gcctccacac 1320
aaagcgagct caccctcagc cagaagcact ggctgtcaga ccgcacctac acctgccagg 1380
tcacctatca aggtcacacc tttgaggaca gcaccaagaa gtgtgcagat tccaacccga 1440
gaggggtgag cgcctaccta agccggccca gcccgttcga cctgttcatc cgcaagtcgc 1500
ccacgatcac ctgtctggtg gtggacctgg cacccagcaa ggggaccgtg aacctgacct 1560
ggtcccgggc cagtgggaag cctgtgaacc actccaccag aaaggaggag aagcagcgca 1620
atggcacgtt aaccgtcacg tccaccctgc cggtgggcac ccgagactgg atcgaggggg 1680
agacctacca gtgcagggtg acccaccccc acctgcccag ggccctcatg cggtccacga 1740
ccaagaccag cggcccgcgt gctgccccgg aagtctatgc gtttgcgacg ccggagtggc 1800
cggggagccg ggacaagcgc accctcgcct gcctgatcca gaacttcatg cctgaggaca 1860
tctcggtgca gtggctgcac aacgaggtgc agctcccgga cgcccggcac agcacgacgc 1920
agccccgcaa gaccaagggc tccggcttct tcgtcttcag ccgcctggag gtgaccaggg 1980
ccgaatggga gcagaaagat gagttcatct gccgtgcagt ccatgaggca gcgagcccct 2040
cacagaccgt ccagcgagcg gtgtctgtaa atcccggtaa atgagagctc 2090

<210> 7
<211> 945
<212> DNA
<213> Artificial Sequence

<220>
<223> B7-EGF fusion construct.

<400> 7
atggcttgca attgtcagtt gatgcaggat acaccactcc tcaagtttcc atgtccaagg 60
ctcattcttc tctttgtgct gctgattcgt ctttcacaag tgtcttcaga tgttgatgaa 120
caactgtcca agtcagtgaa agataaggta ttgctgcctt gccgttacaa ctctccgcat 180

gaagatgagt ctgaagaccg aatctactgg caaaaacatg acaaagtggt gctgtctgtc 240
attgctggga aactaaaagt gtggcccgag tataagaacc ggactttata tgacaacact 300
acctactctc ttatcatcct gggcctggtc ctttcagacc ggggcacata cagctgtgtc 360
gttcaaaaga aggaaagagg aacgtatgaa gttaaacact tggctttagt aaagttgtcc 420
atcaaagctg acttctctac cgtcaacata actaagtctg gaaacccatc tgcagacact 480
aaaaggatta cctgctttgc ttccgggggt ttcccaaagc ctcgctttct ttggttggaa 540
aatggaagag aattacctgg catcaatacg acaatttccc aggatcctga atctgaattg 600
tacaccatta gtagccaact agatttcaat acgactcgca accacaccat taagtgtctc 660
attaaatatg gagatgctca cgtgtcagag gacttcacct gggaaaaacc cccagaagac 720
cctcctgata gcaagcccgg gggtggtggg agcggtggtg gcggcagtgg cggcggcgga 780
actagtaata gtgactctga atgtcccctg tcccacgatg ggtactgcct ccatgatggt 840
gtgtgcatgt atattgaagc attggacaag tatgcatgca actgtgttgt tggctacatc 900
ggggagcgat gtcagtaccg agacctgaag tggtgggaac tgcgc 945

<210> 8
<211> 47
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide.

<400> 8
ctagttccgc cgccgccact gccgccacca ccgctcccac caccccc 47

<210> 9
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> Forward primer.

<400> 9
ctcgaattcc accatggctt gcaattgtca gttgatgc 38

<210> 10
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Reverse primer.

<400> 10
ctccccgggc ttgctatcag gagggtcttc 30

<210> 11
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Forward primer.

<400> 11
ctcactagtg aggtccagct tcagcagtc 29

<210> 12
<211> 44
<212> DNA
<213> Artificial Sequence

<220>
<223> Reverse primer.

<400> 12
ctcgcggccg cttaccgttt gatttccagc ttggtgcctc cacc 44

<210> 13
<211> 87
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide containing translation initiation
site and signal peptide.

<400> 13
ctagactcga gccaccatgg gatggagctg tatcatcctc ttcttggtag caacagctac 60
aggtgtccac tccgaggtcc agctgca 87

<210> 14
<211> 79
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide containing translation initiation
site and signal peptide.

<400> 14
gctggacctc ggagtggaca cctgtagctg ttgctaccaa gaagaggatg atacagctcc 60
atcccatggt ggctcgagt 79

<210> 15
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer with PstI site.

<400> 15
gtccagctgc agcagtctgg 20

<210> 16
<211> 22
<212> DNA

<213> Artificial Sequence

<220>
<223> Primer with Hind III site.

<400> 16
cgtttgattt caagcttggt gc 22

<210> 17
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for the constant region which incorporates a Hind III site.

<400> 17
gcgcaagctt gaaatcaaac gggcctccac caagggccca 40

<210> 18
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for the constant region which incorporates a XhoI site.

<400> 18
gcgcctcgag tcatttaccc ggagacaggg 30

<210> 19
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide with HindIII site.

<400> 19
gcgcaagctt gaaatcaaac gggcctccac acagagccca 40

<210> 20
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide with XhoI site.

<400> 20
gcgcctcgag tcatttaccg ggatttacag a 31

<210> 21

<210> 21
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonuclotide with SpeI site.

<400> 21
ggactagtaa tagtgactct gaatgtccc 29

<210> 22
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide with NotI site and Stop codon.

<400> 22
attagcggcc gcttagcgca gttcccacca cttc 34

<210> 23
<211> 68
<212> DNA
<213> Artificial Sequence

<220>
<223> Translation initiation and secretion signal.

<400> 23
aagcttccac catgggatgg agctgtatca tcctcttctt ggtagcaaca gctacaggtg 60
tccactcc 68

<210> 24
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Coding sequence of a 5T4scFv designated 5T4scFv.1.

<400> 24
gggggtggtg ggagcggtgg tggcggcagt ggcggcggcg gaa 43